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October 22, 1998

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Ms. Magalie Roman Salas Secretary Federal Communications Commission 1919 M Street, NW Room 222 Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMUNICATION OFFICE OF THE SECRETARY

Re: Written Ex Parte Presentation - CC Docket No. 96-262

Dear Ms. Salas:

The attached letter and attachments were provided to each of the Commissioners and Kathryn Brown on October 21, 1998. Additionally, copies were provided this morning to the Commission staff identified on the attached list. Pursuant to Commission rule 1.1206(b)(1), we are herewith providing to you two copies of the written ex parte presentation and attachment for inclusion in the above-referenced proceeding.

Please contact me if you have any questions.

Sincerely,

Lawrence E. Sarjeant

January Vaget

Vice President Regulatory Affairs & General Counsel

attachment

cc w/o attachment:

Chairman William Kennard Commissioner Harold Furchtgott-Roth Commissioner Susan Ness Commissioner Michael Powell Commissioner Gloria Tristani Kathryn Brown

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The Honorable William E. Kennard Chairman Federal Communications Commission 1919 M Street, NW, Room 814, SC 0101 Washington, D.C. 20554

Re: IXC Rate Increases for Residential Customers

Dear Chairman Kennard:

I wrote to you on February 11 and March 18 of this year to share with you our findings that the major IXCs had not passed through the access charge reductions which became effective on January 1, 1998, and had, instead, profited by imposing new charges on their customers. You responded by asking the major IXCs for facts and data concerning their actions. These IXCs maintained then, and have continued to maintain, that long distance rates have dropped significantly for their customers. In a "study" referenced in an AT&T news release issued on August 13, 1998 ("Audit Confirms AT&T's LD Prices Declined by More than Access Fee Reduction"), AT&T claimed that it reduced long distance prices by more than its access fee reduction.

Because the IXCs' continuing claims of consumer price reductions just did not seem to ring true, USTA commissioned two studies in order to take an even closer look at residential long distance rates. USTA asked the National Economic Research Associates (NERA) to perform a quantitative analysis of residential telephone bills in order to provide an estimate of the changes in residential long distance rates charged by AT&T, MCI and Sprint after January 1, 1998. Additionally, we asked NERA to assess the methodology employed by AT&T in its purported study, which it has offered in support of its claim that it passed access charge changes on to residential customers. I have enclosed a copy of each NERA study for your review. Copies will also be provided to the other commissioners as well as the Common Carrier Bureau.

In summary, the NERA studies conclude that:

- In spite of a reduction in the cost of serving their residential customers, the Big Three *increased* residential rates from late 1997 to April 1998. Adding together their fixed monthly charges and their per-minute rates, [NERA found] that their rate increases ranged between \$0.008 and \$0.013 per minute, depending on the carrier, or 5.1 to 9.5 percent.
- AT&T claims that it reduced consumer rates by \$123 million more than its change in access charges from the second quarter of 1997 to the second quarter of 1998. However, if one corrects just three of the errors in AT&T's study, the corrected data would show instead that AT&T increased consumer rates by about \$500 million over that period.

The evidence seems incontrovertible; residential customers are not realizing the flow through benefits of interstate access reductions to the major IXCs.

It is especially important that policy-makers and the public know the truth about what these IXCs are doing with residential customers' rates and the IXCs' motive. It is an unceasing mantra of the IXCs that access rates must be reduced. They assail access charges as being inflated and providing a windfall to local exchange carriers. They typically end the discussion there and do not give the complete story concerning the vital role that access charges have played in the support of universal service. As you know, and as USTA has acknowledged in its proposal for Preserving Universal Service in Competitive Markets for Non-rural Carriers (which has been filed with the FCC and shared with the Federal-State Universal Service Joint Board members and staff), interstate access charges are one of the multiple sources of intra-company support for universal service.

Affordable service for residential and business customers in high cost areas is made possible by support from revenue sources such as interstate access charges. Nonetheless, Congress has mandated, and competition dictates, that current implicit support mechanisms be restructured to make universal service support explicit. Accordingly, USTA has proposed a non-rural carrier plan that would move universal service support from access charges to an explicit, sustainable, competitively neutral mechanism that is sufficient to assure affordable service to the high cost customers of non-rural LECs. Despite the fact that it would be irresponsible and inconsistent with the Telecommunications Act of 1996 for there to be a reduction in interstate access charges without the implementation of a corresponding universal service support mechanism that is consistent with the terms of the 1996 Act, IXCs lose their voices with respect to this important aspect of the access charge discussion. Their agenda is clear -- secure as big a windfall as they

Chairman Kennard October 21, 1998 Page 3

can from access charge reductions without regard for the consequent impacts on universal service and residential customers. The IXCs' strategy cannot be allowed to succeed.

USTA and its members have also taken a great interest in the current AT&T strategy that was reported on this week in Communications Daily (AT&T Mulls Grass-Roots Campaign to Drive Down Access Charges, Communications Daily, October 19, 1998, p.2). AT&T has embarked upon a national initiative campaign designed to circumvent the regulatory process and go directly to state voters to secure reduced intrastate access charges. Whether stated explicitly or implicitly, AT&T's message to voters is that a vote for access reductions is a vote for a rate decrease. Communications Daily reported that AT&T said it will pass the savings from an intrastate access charge reduction on to consumers. AT&T's failure to share interstate access reductions with residential consumers is cause for disbelief. Why should anyone believe that AT&T's conduct will be any different this time? We plan to share the NERA studies with our members, and anyone else that is interested, so that voters will have access to all the facts before they cast their ballots.

Should you have questions about the NERA studies, we would be happy to coordinate the scheduling of meetings with the authors. Please do not hesitate to contact Larry Sarjeant, USTA's Vice President for Regulatory Affairs and General Counsel, if we can be of assistance, or if you have questions. We look forward to continuing our work with you, the other commissioners and the FCC staff on the important issues of access and universal service reform.

Sincerely,

Roy Neel

President and CEO

Roy Mul / Res

attachments

cc:

Commissioner Harold Furchtgott-Roth

Commissioner Susan Ness Commissioner Michael Powell Commissioner Gloria Tristani

Kathryn Brown

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AT&T, MCI, AND SPRINT FAILED TO PASS THROUGH THE 1998 INTERSTATE ACCESS CHARGE REDUCTIONS TO CONSUMERS

by

Paul S. Brandon and William E. Taylor

October 16, 1998

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AT&T, MCI, AND SPRINT FAILED TO PASS THROUGH THE 1998 INTERSTATE ACCESS CHARGE REDUCTIONS TO CONSUMERS

I. SUMMARY OF FINDINGS AND INTRODUCTION

A. Summary of Findings

At the request of the United States Telephone Association (USTA), we have done a quantitative analysis of a large sample of residential telephone bills to estimate the changes in residential long-distance rates charged by the Big Three—AT&T, MCI, and Sprint—after January 1, 1998. We have also estimated the changes in access charges and other fees that AT&T, MCI, and Sprint pay to serve residential customers as a result of the January 1st interstate access charge reforms. In addition, we have done an analysis of rate and cost changes following the July 1, 1998, access charge reductions.

Highlights of our findings regarding residential interstate domestic direct-dial rates and carrier costs are as follows:

- In spite of a reduction in the cost of serving their residential customers, the Big Three *increased* residential rates from late 1997 to April 1998. Adding together their fixed monthly charges and their per-minute rates, we find that their rate increases ranged between \$0.008 and \$0.013 per minute, depending on the carrier, or 5.1 to 9.5 percent.
- We estimate that the changes in access charges and other fees on January 1st reduced the average cost of the Big Three by about \$0.004 to \$0.006 per conversation minute, depending on the carrier, or 7 to 10 percent.
- The net increase in the carriers' margins of rates in excess of access charges and other fees ranged between about \$0.013 and \$0.017 per minute, depending on the carrier, or about 13 to 23 percent, from late 1997 to April 1998. In total, we



estimate that the carriers raised their margins at the expense of residential customers by about \$850 million per year.

• In addition, after the July 1st access charge reductions, the Big Three raised their margins by another \$0.009 to \$0.020 per minute, depending on the carrier, or 10 to 16 percent. Those increases at the expense of residential customers amount to another \$1 billion per year.

The Big Three clearly failed to pass through to residential customers the benefits of reductions in access charges and other fees. If one combines this evidence with the historical pattern of AT&T's increases in residential rates since 1991, one must conclude that there is no factual basis on which to presume that the Big Three long-distance carriers would pass through to residential customers any future access charge reductions. These findings also dispel the myth that the residential long-distance market is adequately competitive.

B. Introduction

Federal Communications Commission Chairman William E. Kennard recently referred to "the growing body of evidence that suggests that the nation's largest long distance companies are raising rates when their costs of providing service are decreasing." He refers particularly to the lack of reductions in long distance carriers' per-minute rates after the local exchange carriers substantially reduced per-minute access charges on January 1, 1998. The evidence is especially extensive that the long distance carriers have failed to pass through access charge reductions to *residential* customers in recent years. For seven years, AT&T has

See, e.g., (1) Paul S. Brandon, "AT&T's 1997 Rate Changes" (February 27, 1998); (2) DataQuest, "Public Telephony Services North America: Market Analysis" (March 2, 1998), pp. 1-3; (3) Keep America Connected, "Still in Search of Savings" (May 25, 1998); (4) Paul W. MacAvoy, The Failure of Antitrust and Regulation to Establish Competition in Long-Distance Services (Cambridge, MA and Washington, DC: MIT Press and AEI Press, 1996), pp. 105-174; (5) Richard L. Schmalensee, Declaration on Behalf of BellSouth, Second Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana, before the Federal Communications Commission, CC Docket No. 98-171 (July 9, 1998), ¶¶ 11-25; (6) William E. Taylor, "Effects of Competitive Entry in the U.S. Interstate Toll Markets" (August 1991); (7) William E. Taylor, "Effects of Competitive Entry in the U.S. Interstate Toll Markets: An Update" (May 28, 1992); (8) William E. Taylor and Lester D. Taylor, "Postdivestiture Long-Distance Competition in the United States," American Economic Review, Vol. 83, No. 2 (May 1993), pp. 185-(continued...)



See, e.g., William E. Kennard, letter to Bert Roberts, CEO of MCI (February 26, 1998).

been increasing the interstate long distance rates it charges to residential customers even though interstate access charges have fallen substantially.³ That result holds whether one examines basic rates or average rates. Specifically, from 1991 to January 1998, AT&T raised basic interstate rates net of access charges by \$0.062 a minute, or 73 percent.⁴ Even accounting for the discounts that some customers receive, AT&T raised average residential rates net of access charges by \$0.029, or 39 percent.⁵

Effective January 1, 1998, the FCC ordered several changes in access charges and other fees that long-distance carriers pay:

- The local exchange carriers reduced the average interstate per-minute access charges by \$0.0114, from \$0.0518 to \$0.0404 per conversation minute.⁶
- The local exchange carriers began collecting from long-distance carriers a Presubscribed Interexchange Carrier Charge (PICC), averaging \$0.49 for each primary residential line and \$1.50 for each additional line.
- The FCC simultaneously eliminated the charge of \$0.5371 per line that the long distance carriers had been paying to the National Exchange Carrier Association (NECA) for the Universal Service Fund and Lifeline Assistance plan. Thus, the net change in per-line charges was a decrease of \$0.0471 for primary lines and an increase of \$0.9629 per line for additional lines.

(...continued)

⁸ Federal Communications Commission, First Report and Order, Access Charge Reform, CC Docket 96-262, Price Cap Performance Review for Local Exchange Carriers, CC Docket 94-1, Transport Rate Structure and Pricing, CC Docket No. 91-213, and End User Common Line Charges, CC Docket No. 95-72 (Released May 16, 1997), FCC 97-158, ¶ 94 and fn. 114.



^{190; (9)} William E. Taylor and J. Douglas Zona, "An Analysis of the State of Competition in Long-Distance Telephone Markets," *Journal of Regulatory Economics*, Vol. 11 (1997), pp. 227-255.

³ Schmalensee, op. cit.

⁴ Schmalensee, op. cit. These figures are for per-minute rates and access charges only.

⁵ Ihid

⁶ Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, *Trends in Tele*phone Service (July 1998), Table 1.2. These figures show the U.S. average for all local exchange carriers, and they show the sum of originating and terminating switched access charges.

⁷ Trends in Telephone Service, op. cit., Table 1.1. These figures are the PICC charges averaged for all local exchange carriers.

- The long-distance carriers began paying Universal Service Fund (USF) assessments, as follows:
 - 0.72 percent of each carrier's interstate, international, and intrastate revenues went to the schools, libraries, and rural healthcare fund, and
 - 3.19 percent of interstate and international revenues went to the high-cost/low-income fund.⁹

USTA asked us to evaluate whether AT&T, MCI, and Sprint passed through these changes to residential customers. We are particularly concerned with the following three questions:

- To what extent did the long-distance carriers' fixed charges match their increased per-line costs for residential customers?
- To what extent did they flow through the reductions in residential per-minute rates?
- How did the total change in rates paid by residential customers—usage charges and fixed charges combined—compare with the total change in charges paid by the long-distance carriers?

Section II describes our methodology for estimating the three carriers' changes in residential rates and in access charges and other fees. Our study results are in Section III.

Federal Communications Commission, Public Notice, "First Quarter 1998 Universal Service Contribution Factors Revised and Approved," CC Docket No. 96-45 (December 16, 1997), DA 97-2623. The FCC changed the assessments to 0.76 percent and 3.14 percent, respectively, for the second quarter. (Federal Communications Commission, Public Notice, "Proposed Second Quarter 1998 Universal Service Contribution Factors Announced," CC Docket No. 96-45 (February 27, 1998), DA 98-413.) The FCC again changed the schools, libraries, and rural healthcare fund assessment to 0.72 percent for the third quarter, but it left the high-cost/low-income fund assessment unchanged. (Federal Communications Commission, Public Notice, "Third Quarter 1998 Universal Service Contribution Factors Revised and Approved," CC Docket No. 96-45 (June 12, 1998), DA 98-1130.)



II. METHODOLOGY

A. The Data

This section describes the methodology we use to evaluate the degree of pass-through of the Big Three long-distance carriers. Our analysis uses a database of telephone bills of a random sample of U.S. residential households. 10 The database contains both long-distance billing summary information and detailed data on each long-distance call. From the database, we construct a sample of customer bills before the January 1, 1998, access reforms and another sample after the reforms. To exclude from the calculations AT&T's November 8, 1997, increase in direct-dial basic rates, the "before" data for AT&T includes bills with dates after December 8, 1997, but before January 1, 1998. Since MCI and Sprint did not change residential direct-dial basic rates in November or December, we define their "before" data as including bills with dates after November 1, 1998, but before January 1, 1998. That larger period ensures adequate sample sizes. To give AT&T time to reduce its rates, implement fixed per-account charges, and alter its calling-plan marketing efforts, the "after" data for AT&T includes bills with dates after April 1, 1998, but before July 1, 1998. For MCI and Sprint, who implemented fixed per-account charges before AT&T did, the "after" data includes bills with dates after March 1, 1998, again to maintain an adequate sample size. ¹¹ In round numbers the total sample size is about 3,000, customer bills total about \$40,000 for interstate domestic direct-dial calls and monthly charges, the number of calls is about 10,000, and the number of conversation minutes is about 200,000. The statistical strength of the key findings is high.

B. Types of Changes in Long-Distance Rates

We focus on the changes in the long-distance carriers' rates and costs for domestic interstate interLATA direct-dialed calls. If we had calculated an overall change in average revenue per minute for a mix of different kinds of calls, the calculation would be distorted by changes in the mix. For example, even if rates had not changed, the overall average revenue

¹¹ The sample size for AT&T is ample even with its shorter periods.



¹⁰ Market Facts, Inc., and PNR and Associates, Inc., *MarketShare Monitor* (September 9, 1998). The database also contains customer weights, which we use to make the sample representative of U.S. households.

per minute would change if the volume of domestic calls were to change relative to the volume of international calls or if the volume of direct-dialed calls were to change relative to the volume of more expensive types of calls. Our focus on interstate interLATA domestic direct-dialed calls prevents many such distortions. However, we underestimate the size of the carrier's rate increases by not controlling for any change in the mix of direct-dialed calls by rate period or mileage band.¹²

None of the three long-distance carriers reduced its basic rates for interstate interLATA domestic direct-dialed calls during the period studied.

The sources of changes in the rates that customers paid after versus before January 1st were the following:

- the fixed monthly charges per account that the carriers imposed,
- changes in the terms of promotional offers and in the number of customers to whom
 the carriers make such offers,
- changes in the terms of calling plans, and changes in how many customers subscribe to each plan,
- changes in customer volume, for which we control to avoid seasonal variation,¹³ and

The average rate per minute that a customer pays is the sum of individual domestic direct-dialed call charges plus service charges minus credits for free calls, plus other charges and credits, plus any fixed monthly charges, all divided by the number of domestic direct-dialed minutes. Suppose that a customer has a calling plan with a monthly subscription fee. Then the customer's average rate per minute can vary as the customer's usage varies from one month to another. If the customer's calling volume is higher in month A than in month B, then, at given rates, the customer's average rate paid would be lower in month A than in month B, since the subscription fee is amortized over more minutes in month A. For all three carriers, we control for the effect that volume differences have on average rates in that way in the "before" and "after" periods. In addition, if a customer has a calling plan with a volume discount, then an increase in the customer's calling volume might put the customer into a higher discount bracket. Therefore, for AT&T and MCI, we control for average calling-volume differ
(continued...)



¹² From the "before" period to the "after" period, there were some changes in mix within the set of interstate inter-LATA domestic direct-dialed calls for the three carriers. The shifts generally bias downward our estimate of rate changes. The percentages of interstate interLATA domestic direct-dialed calls that were on weekends in the "before" and "after" periods for AT&T were, respectively, 37.2 and 40.9 percent; for MCI they were 48.7 and 50.7 percent; and for Sprint they were 38.0 and 41.9 percent. The percentages of interstate interLATA domestic direct-dialed calls that were for mileages exceeding 500 miles in the "before" and "after" periods for AT&T were, respectively, 56.8 and 53.7 percent; for MCI they were 56.8 and 58.3 percent; and for Sprint they were 65.2 and 59.4 percent.

• changes in the mix of calls by distance band and time of time or day of week.

We object to characterizing as a rate response to access charge changes either new carrier offerings of calling plans and promotions or customer migration among a carrier's rate schedules. After an access charge decrease, a competitive market would promptly pass on the reductions in costs to *all* consumers, not to select market segments. Nevertheless, to be generously conservative, for this study we incorporate the discounts that customers might receive with their calling plans, both in the "before" period and in the "after" period. (We also count the premiums over basic rates that many customers pay.) We use the following procedure to calculate each carrier's changes in rates charged per minute and its change in rates charged per account, both for the "before" period and for the "after" period:

- For each customer, we sum the interstate interLATA domestic direct-dial call charges from the call detail portion of the customer's telephone bill, incorporating any discounts, if applicable.
- We apportion any service charges, credits for free minutes, and other charges and credits (excluding any PICC pass-through charges) between (1) interstate inter-LATA domestic direct-dial calls and (2) other kinds of calls. The apportionment is in proportion to the minutes of calling of the two categories of calls.
- For the "after" period, we identify interstate PICC pass-through charges. The carriers' policies regarding residential interstate PICC pass-through charges as of April 1998 were as follows:¹⁴
 - AT&T: Whether the customer made AT&T calls in the month or not, AT&T charged \$0.95 per month for each presubscribed account that had a calling plan,

Market Dynamics, Inc., Long Distance for Less: Dr. Bob's "Blue Sheet" (March 31, 1998), p. 3. In April 1998, based on our analysis of the data from MarketShare Monitor, op. cit., AT&T's and Sprint's deployment of their announced PICC policies was incomplete. Our calculations assume that they would complete the deployment of these charges.



^{(...}continued)

ences in the "before" and "after" periods. Sprint's leading calling plans are not volume-discount plans so no such adjustment is necessary.

charged \$1.50 for each presubscribed account that had no calling plan and had more than one line, and charged nothing for each presubscribed account that had no calling plan and had only one line.

- MCI: It charged \$1.07 per presubscribed account per month to customers using Execunet (basic service) or homeMCI One, except in months in which the customer made no MCI calls.
- Sprint: It charged \$0.80 per presubscribed account per month, whether the customer made Sprint calls or not.¹⁵
- For each carrier, (1) we sum all customers' discounted interstate interLATA domestic direct-dial call charges, (2) we sum all customers' interstate interLATA domestic direct-dial portions of service charges, credits for free minutes, and other charges and credits (excluding any PICC pass-through charges), and (3) for the "after" period, we sum all PICC pass-through charges.
- We also evaluate the effect of the carriers' policies regarding account charges imposed on residential customers after July 1998.

C. The Big Three Also Raised Calling-Card Rates.

In limiting the analysis to direct-dialed calls, we neglect the large increases in calling-card rates that all three carriers imposed on their customers. Most calling-card calls are unassisted customer-dialed calling-card calls within the continental U.S., and most such calls use the long-distance carrier's own calling card. The carriers' increases in interstate rates for such calls were as follows:

AT&T: For calling-card calls made through its 800-CALL-ATT number, it charged \$0.35 per call plus \$0.35 per minute as of May 27, 1997, and it raised the price to \$0.65 per call plus \$0.40 per minute on February 23, 1998.

Sprint charged \$0.80 if the customer's local service came from Aliant, Ameritech, Bell Atlantic, BellSouth, Cincinnati Bell, Citizens, Frontier, GTE, Nevada Bell, Pacific Bell, SNET, Southwestern Bell, Sprint (United and Centrel), or U S WEST. Robert Self, Long Distance for Less, Vol. 11, No. 2, p. 35.



- MCI: For the calls made using the MCI card, it charged \$0.89 per call plus \$0.30 per minute on September 11, 1997, it raised the price to \$0.89 per call plus \$0.40 per minute on March 1, 1998, and it again raised the price to \$0.89 per call plus \$0.45 per minute on May 6, 1998. 17
- Sprint: Its rate was \$0.60 per call plus \$0.35 per minute on July 1, 1997,¹⁸ through at least March 16, 1998,¹⁹ and it raised the price to \$0.95 plus \$0.40 per minute on June 8, 1998.²⁰

We report the estimated impact of these rate increases below. The Big Three raised rates for many other types of non-direct-dialed calls as well.

D. Calculation of Access Charges and Other Fees Paid by Long-Distance Carriers

From the above data on long-distance bills, we identify each customer's primary long-distance carrier.²¹ Then we calculate the access charges and other fees that the three carriers pay to serve the customers, from the following data:

• the minutes of interstate interLATA domestic direct-dial calls, which determine the per-minute interstate access charges attributable to such calls,

(...continued)

²¹ For sample customers who were not billed by any long distance carrier, we assign them to AT&T, MCI, and Sprint in proportion to their share of residential lines per James Zolnierek, Katie Rangos, James Eisner, Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, Long Distance Market Shares: First Quarter 1998 (June 1998), Table 4.1. Any error in this assumption might slightly shift estimated margins among the three carriers; however, since they control over 85 percent of residence lines, such errors are unlikely to change results for the three carriers in total by a significant amount.



¹⁶ Long Distance for Less, op cit., Vol. 10, No. 4, and Vol. 11, No. 2. For 0+ calls, AT&T raised rates from \$0.65 per call plus \$0.35 per minute to \$0.95 per call plus \$0.40 per minute.

¹⁷ CCMI, Guide to Networking Services on CD-ROM (October 1997, April 1998, and June 1998). Long Distance for Less, op. cit., reports somewhat different rates. It says that MCI's rate was \$0.99 per call plus \$0.35 per minute on December 1, 1997, and that the rate was \$0.99 per call and \$0.45 per minute on May 1, 1998.

¹⁸ Long Distance for Less, op. cit., Vol. 10, No. 4.

¹⁹ Guide to Networking Services on CD-ROM, op. cit. (April 1998).

²⁰ Long Distance for Less, op. cit., Vol. 11, No. 2, and Guide to Networking Services on CD-ROM, op. cit. (July 1998).

- the number of lines, which determines the PICC (after January 1) and the NECA assessments for the Universal Service Fund and Lifeline Assistance plan (before January 1) paid by the primary carrier, ²²
- interstate interLATA domestic direct-dial revenues, accounting for any volume discounts, which determine the carriers' USF contributions attributable to such calls.

To the interstate jurisdiction we assign the interstate access charges, the PICCs, and the USF contributions attributable to residential customers and their interstate interLATA domestic direct-dial calls.

III. RESULTS

A. Before and After January 1, 1998

1. The Big Three Raised Interstate Direct-Dial Rates Relative to Access Charges and Other Fees.

Using the methodology described in Section II, we have calculated the results presented in Tables 1, 2, and 3. To make the results easy to interpret, we express all results in units of dollars per interstate interLATA domestic direct-dialed conversation minute.²³

a. The Big Three Increased Residential Rates.

Table 1 shows the changes in interstate interLATA domestic direct-dial rates paid by customers before and after January 1, 1998.²⁴ We divide these rates into two categories. One category is for "usage," including per-minute rates for calls (discounted as appropriate), service charges, credits for free minutes, and other charges and credits (excluding PICC pass-through charges). The other category is for the PICC pass-through charges.

²⁴ Numbers might not add because of rounding.



²² From each customer's local exchange carrier bill, we calculate the number of lines from data on the FCC's subscriber line charge.

²³ To make comparisons more meaningful between rates paid by customers and rates paid by carriers, as the FCC reports them, we have converted customers' billed minutes to conversation minutes. The number of conversation minutes is slightly smaller than the number of billed minutes.

Table 1
Interstate Domestic InterLATA Direct-Dialed Rates Paid by Customers
Before and After January 1, 1998
(Expressed per Conversation Minute)

	(a)	(b)	(c) $=(a)+(b)$	(d)
Carrier and Period	Average Rate for Usage	PICC Pass- Through Charges	Total Rate Paid by Customers	Percentage Change in Total Rate Paid by Customers
AT&T				
Before (-)	\$0.1679	\$0.0000	\$0.1679	
After (+)	\$0.1657	\$0.0107	\$0.1764	
Change	(\$0.0022)	\$0.0107	\$0.0085	5.1%
<u>MCI</u>				
Before (-)	\$0.1371	\$0.0000	\$0.1371	
After (+)	\$0.1425	\$0.0076	\$0.1500	
Change	\$0.0054	\$0.0076	\$0.0130	9.5%
Sprint				
Before (-)	\$0.1339	\$0.0000	\$0.1339	
After (+)	\$0.1367	\$0.0046	\$0.1414	
Change	\$0.0029	\$0.0046	\$0.0075	5.6%
() = Decreas	ie e			

We see that all three carriers increased their total rates paid by residential customers. Although AT&T decreased its per-minute rates slightly, once we account for its PICC pass-through charges, it increased rates by \$0.0085 per minute, or 5.1 percent. MCI increased rates by \$0.0130 per minute, or 9.5 percent; and Sprint increased rates by \$0.0075 per minute, or 5.6 percent. In case some readers might be surprised at how high AT&T's average rate for usage is, keep in mind that there are a large percentage of AT&T's residential customers who do not have calling plans, and many of those with a calling plan paid rates that were above the \$0.15 rate of AT&T's One Rate plan.



b. The Big Three Benefited from Lower Access Charges and Other Fees.

Table 2 shows the changes in what the long-distance carriers paid to serve residential customers and their interstate interLATA domestic direct-dialed calls—per-minute access charges, NECA assessments for the Universal Service Fund and Lifeline Assistance plan, PICCs, and USF assessments:²⁵

Table 2
Interstate InterLATA Domestic Direct-Dial Charges Paid by Carriers
Before and After January 1, 1998
(Expressed per Conversation Minute)

	(a)	(b)	(c) $=(a)+(b)$	(d)	(e)	(f) (d)+(e)	(g) = (c)+(f)	(h)
Carrier and Period	Per- Minute Access Charges	USF Assess- ment	Total Per- Minute Access Charges and USF	NECA Assess-	PICC	Total NECA Assess- ment and PICC	Total Charges	Percentage Change in Total Charges Paid by Carriers
AT&T								
Before (-)	\$0.0518	\$0.0000	\$0.0518	\$0.0099	\$0.0000	\$0.0098	\$0.0617	
After (+)	\$0.0404	\$0.0069	\$ 0.0473	\$0.0000	\$0.0091	\$0.0091	\$0.0564	
Change	(\$0.0114)	\$0.0069	(\$0.0045)	(\$0.0099)	\$0.0091	(\$0.0008)	(\$0.0053)	-8.6%
<u>MCI</u>								
Before (-)	\$0.0518	\$0.0000	\$0.0518	\$0.0082	\$0.0000	\$0.0082	\$0.0600	
After (+)	\$0.0404	\$0.0059	\$0.0463	\$0.0000	\$0.0093	\$0.0093	\$0.0555	
Change	(\$0.0114)	\$0.0059	(\$0.0055)	(\$0.0082)	\$0.0093	\$0.0011	(\$0.0045)	-7.5%
Sprint								
Before (-)	\$0.0518	\$0.0000	\$0.0518	\$0.0065	\$0.0000	\$0.0065	\$0.0583	
After (+)	\$0.0404	\$0.0055	\$0.0459	\$0.0000	\$0.0064	\$0.0064	\$0.0523	
Change	(\$0.0114)	\$0.0055	(\$0.0059)	(\$0.0065)	\$0.0064	\$0.0000	(\$0.0059)	-10.2%
$\overline{()}$ = Decre	ease							

That table shows that all three carriers benefited from a reduction in their total access charges and other fees. To serve its residential customers, AT&T's access charges and other fees fell

²⁵ Numbers might not add because of rounding.



by \$0.0053 per conversation minute, or 8.6 percent; MCI's fell by \$0.0045 per minute, or 7.5 percent; and Sprint's fell by \$0.0059 per minute, or 10.2 percent.

Note that for each carrier the discontinued NECA assessment was about equal to the new PICCs. For example, beginning January 1st AT&T saved \$0.0099 per minute by the elimination of the NECA assessment, while it began paying \$0.0091 per minute in PICCs. Its per-line costs decreased by \$0.0008 per minute. Yet it imposed PICC pass-through charges averaging \$0.0107 per minute. (See Column (b) of Table 1.) It is obvious how unjustified the Big Three's so-called PICC pass-through charges were. They were not a pass-through of anything; they were simply rate increases without any significant corresponding increase in costs.

Further, since the Big Three's costs of usage fell, the carriers should have reduced rates for usage. Instead they increased their margins on usage as well. For example, MCI's residential per-minute access charges and USF charges fell by \$0.0055 per minute (see Column (c) in Table 2), yet it raised its average usage rates by \$0.0054 per minute (see Column (a) in Table 1). Thus, it raised its margin on usage by \$0.0109 per minute.

c. The Big Three Increased Their Residential Profit Margins.

Table 3 presents the carriers' margins of rates in excess of access charges and other fees:²⁶

²⁶ Numbers might not add because of rounding.



Table 3

Margin of Rates in Excess of Access Charges and Other Fees
Before and After January 1, 1998
(Expressed per Conversation Minute)

	(a)	(b)	(c) =(a)-(b)	(4)
Carrier and Period	Total Rate Paid by Customers	Total Charges Paid by Carriers	Margin	Percentage Change in Margin
AT&T				
Before	\$0.1679	\$0.0617	\$0.1061	
After	\$0.1764	\$0.0564	\$0.1200	
Change	\$0.0085	(\$0.0053)	\$0.0138	13.0%
<u>MCI</u>				
Before	\$0.1371	\$0.0600	\$0.0771	
After	\$0.1500	\$0.0555	\$0.0945	
Change	\$0.0130	(\$0.0045)	\$0.0175	22.7%
Sprint				
Before	\$0.1339	\$0.0583	\$0.0756	
After	\$0.1414	\$0.0523	\$0.0890	
Change	\$0.0075	(\$0.0059)	\$0.0134	17.7%
() = Decrease	•			

Since all three carriers increased rates while their access charges and other fees fell, it is obvious that their residential margins of rates in excess of access charges and other fees would rise. As the above table shows, AT&T raised its margin by \$0.0138 per minute, or 13.0 percent; MCI raised its margin by \$0.0175 per minute, or 22.7 percent; and Sprint raised its margin by \$0.0134 per minute, or 17.7 percent.

It might be difficult for some readers to appreciate how large these increases are. We estimate that the long-distance carriers increased their margins at the expense of residential customers by a total of about \$850 million per year.²⁷

²⁷ This figure counts only interstate interLATA domestic direct-dial calling (as defined above) and PICC pass-through charges. To calculate this figure, we compute the average usage per customer for each carrier. From (continued...)



2. The Big Three Also Raised Interstate Calling-Card Rates.

Now recall that the carriers' rate increases shown in the tables above are for direct-dialed calls only. The Big Three also substantially raised their interstate domestic calling card rates, as reported in Section II. If one were to calculate the rate increase for calling-card and direct-dial calls combined, that increase would be larger than the increase for direct-dial calls alone by the following amounts: AT&T \$0.0038 per minute, ²⁸ MCI \$0.0064 per minute, Sprint \$0.0036 per minute. Then the rate increase for direct-dialed and calling-card calls combined would be \$0.0123 per minute, \$0.0194 per minute, and \$0.0111 per minute for AT&T, MCI, and Sprint, respectively. We estimate that the calling-card rate increases at the expense of residential customers amounted to about \$250 million per year.

3. Independent Sources Also Report Interstate Rate Increases.

The FCC, the Bureau of Labor Statistics, and Keep America Connected also found that the Big Three long-distance carriers raised rates after January 1st:

• For each of several months, the FCC calculated what the long-distance bills would be for households in each of five usage-volume segments, assuming that each household chooses a calling plan to minimize its AT&T long-distance bill, given its usage pattern. The calculations included AT&T's PICC pass-through charges for a single-line household. For every usage segment, the average rate per minute rose from December 1997 to April 1998.³⁰ For all five usage-volume segments com-

(...continued)

that computation and the data on margins in Table 3, we calculate the increase in annual margin per customer for each carrier. We weight those annual margins per customer by the shares of presubscribed residential lines of each carrier (Long Distance Market Shares: First Quarter 1998, op. cit., Table 4.1). We multiply the resulting weighted average margin per customer by the total number of U.S. residential subscribers. (Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, Trends in Telephone Service (July 1998), Table 16.1.)

Tracy Waldon, Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, Reference Book of Rates, Price Indices, and Expenditures for Telephone Service (July 1998), Table 2.4. (The (continued...)



²⁸ Since the rate is lower for calls through 800-CALL-ATT than it is for 0+ calls, this calculation assumes that AT&T calling-card calls go through 800-CALL-ATT.

 $^{^{29}}$ AT&T: \$0.0085 + \$0.0038 = \$0.0123. MCI: \$0.0130 + \$0.0064 = \$0.0194. Sprint: \$0.0075 + \$0.0036 = \$0.0111.

bined, the average rates rose from \$0.1253 per minute to \$0.1698 per minute. Even so, those calculations do not account for PICC pass-through charges that AT&T assessed on zero-usage customers.

- The Bureau of Labor Statistics develops a price index for interstate toll service.

 This index rose from 75.2 in December 1997 to 75.3 in April 1998 to 76.1 in June 1998.³¹
- Based on an analysis of 18 different hypothetical calling patterns and 12 different calling plans for the Big Three long-distance carriers, Keep America Connected found that, for 83 percent of the possible comparisons, residential customers would pay more at the rates in effect in April 1998 than at the rates in effect in September 1997.³²

B. The Big Three Raised Rates and Margins Again after July 1, 1998.

Effective July 1, 1998, the FCC ordered reductions in access charges from \$0.0404 to \$0.0382,³³ it reduced the average PICC for non-primary lines from \$1.50 to \$1.38,³⁴ and it reduced the schools, libraries, and rural healthcare USF assessment from 0.76 percent to 0.72 percent.³⁵ Yet the Big Three raised residential rates again:

• AT&T: Beginning in July 1998, AT&T charged two fees per presubscribed account per month, regardless of whether the customer made AT&T calls that month and

calculations do not account for changes among calling plans that actual households made during the period. The calculations in our report do so.)

³⁵ Federal Communications Commission, Public Notice, "Proposed Second Quarter 1998 Universal Service Contribution Factors Announced," CC Docket No. 96-45 (February 27, 1998), DA 98-413; and Federal Communications Commissio, Public Notice, "Third Quarter 1998 Universal Service Contribution Factors Revised and Approved," CC Docket No. 96-45 (June 12, 1998), DA 98-1130.



^{(...}continued)

³¹ Reference Book of Rates, Price Indices, and Expenditures for Telephone Service, op. cit., Table 4.2.

³² Keep America Connected, "Still in Search of Savings" (May 25, 1998), p. 2. These comparisons account for the carriers' PICC pass-through charges. The comparisons include AT&T's rate increase on November 8, 1997, whereas the analysis in our report excludes that rate increase.

³³ Trends in Telephone Service, op. cit., Table 1.2.

³⁴ Trends in Telephone Service, op. cit., Table 1.1.

regardless of whether the customer had a calling plan—an \$0.85 "carrier line charge"³⁶ and a \$0.93 "universal service charge."³⁷ Then, beginning in August 1998, it charged any new customer a minimum bill of \$3.00 per month; also, beginning January 1, 1999, any customer that changes calling plan will be subject to the \$3.00 minimum bill.³⁸ The latter policy appears to implement an intent announced by AT&T's Chairman of the Board:³⁹

Armstrong announced crackdown on "occasional callers," term that refers to 20 million customers who make less than 3 long distance calls per month. . . . New approach will be to force them into pricing plan that allows company to make money or allow them to leave, Armstrong said.

- MCI: MCI instituted an additional USF surcharge of five percent of the total long distance bill for residential customers using Execunet or homeMCI One.⁴⁰ (MCI filed to raise its USF surcharge to six percent as of November 2, 1998.⁴¹)
- Sprint: Effective June 23, 1998, Sprint began charging residential customers 4.5
 percent of interstate and international charges (including usage, non-usage, and PIC

⁴¹ The USF pass-through applies to customers on Execunet, Credit/Star Card, homeMCI One (including homeMCI One Advanced and International Savings Plan and including MCI One Savings Plan). Market Dynamics, Inc., "Dr. Bob's" Telecom CheckSheet, No. 127 (October 8, 1998). We use a five percent USF surcharge in our analysis.



³⁶ AT&T reduced the size of its "carrier line charge" from April's \$0.95 to \$0.85 per account, and it eliminated the charge of \$1.50 for the second lines of basic-rate customers.

³⁷ AT&T news release, "AT&T Assessing Flat Fee on Monthly Residential Bills for Universal Service Fund" (June 18, 1998), http://www.att.com/press/0698/980618.csa.html.

³⁸ AT&T news release, "AT&T Announced \$3 Monthly Minimum for New Residential Customers" (August 14, 1998), http://www.att.com/press/0898/980814.csa.html; TRAC news release, "AT&T Breaks Faith with Consumers" http://www.trac.org/nr/081498.html. AT&T's \$0.93 and \$0.85 monthly charges do not count toward satisfying the \$3.00 minimum. Low-income customers who qualify for a state telephone assistance program are exempt. A few selected other groups are also exempt. (AT&T Tariff FCC No. 27 (effective September 5, 1998), p. 4-7.3.)

³⁹ "AT&T's Armstrong Announces Job Cuts, Says Senior Management 'Owns' Strategy," *Communications Daily*, Vol. 18, No. 17 (January 27, 1998).

⁴⁰ MCI service representative (October 7, 1998).

charges). 42 It also now charges each residential account \$0.85 per month as a PICC pass-through instead of the previous \$0.80 per month.

Recall that we showed in the previous section that the carriers' USF assessment was smaller than the reduction in per-minute access charges for their residential business. Thus, no separate recovery of their USF costs was necessary. Yet all three of them instituted USF pass-through charges.

We have completed a partial quantitative analysis of the above rate changes. The analysis is partial in that we do not yet have data after July 1 to update calculations of the discounts that customers might be receiving now versus in the second quarter of 1998. As you can see below, however, since the rate increases are so large, increases in discounts sufficient to compensate for those rate increases are extremely unlikely in such a short period of time. Based on the assumption that residential customers continue paying the same rates for usage as in April 1998, Table 4 shows the effect on their average bills (expressed per interstate inter-LATA domestic direct-dial conversation minute) from the new charges that the carriers are imposing now.⁴³ We show the effect of AT&T's \$3.00 minimum on a separate line. This charge will affect customers as they change carriers to AT&T or, after January 1, 1999, as they change calling plans. Thus, we interpret the result as being the amount by which this policy could eventually raise average rates.

⁴³ Numbers might not add because of rounding.



⁴² The rate is 4.9 percent if the local exchange carrier bills for Sprint long distance (excluding Ameritech, Bell Atlantic, BellSouth, GTE, Nevada Bell, Pacific Bell, Southwestern Bell, Sprint (United and Centrel), or U S WEST.) Otherwise, the rate is 4.5 percent. Long Distance for Less, op. cit., Vol. 11, No. 2, p. 35.

Table 4
Change in Rates Paid by Customers and Change in Access Charges and Other
Fees Paid by Carriers
After July 1, 1998
(Expressed per Conversation Minute)

	(a)	(b)	(c)	(d) (a)-(c)	(e)
	Change in	Percentage Change in	Change in Total	(u) (v)	
	Total Rate	Total Rate	Charges	. ·	Percentage
Carrier	Paid by Customers	Paid by Customers	Paid by Carriers	Change in Margin	Change in Margin
Carrier	Customers	Customers	Carriers	Margin	Margin
AT&T	\$0.0180	10.2%	(\$0.0017)	\$0.0197	16.4%
AT&T \$3 Minimum ⁴⁴	\$0.0128	6.6%	\$0.0005	\$0.0126	8.8%
MCI	\$0.0075	5.3%	(\$0.0021)	\$0.0096	10.2%
Sprint	\$0.0068	4.9%	(\$0.0021)	\$0.0088	9.9%
() = Decrease					

Table 4 shows that after July 1st AT&T increased average residential rates by yet another \$0.0180 per conversation minute, or 10.2 percent over April's average, even though its access charges and other fees declined. It increased its margin by 16.4 percent. Its policy of billing a minimum of \$3.00 per month to new customers (or, after January 1, 1999, customers who change calling plan) could eventually increase its residential margins as much as another \$0.0128 per minute, or 8.8 percent. MCI and Sprint also increased margins by \$0.0096 and \$0.0088 per minute, respectively, or 10.2 percent and 9.9 percent. We estimate that the increases in margins of the Big Three at the expense of residential customers amounted to about \$1 billion per year from April to July. AT&T's \$3.00-minimum-billing policy could eventually cost consumers about another \$500 million per year.

IV. CONCLUSIONS

Clearly, the Big Three long-distance carriers failed to flow through reductions in access charges to residential customers in 1998. Instead they substantially raised residential rates after

⁴⁴ The "Change in Total Charges Paid by Carriers" in Column (c) for AT&T rises in the scenario regarding its \$3 minimum policy solely because of USF assessments on its additional billings.



the January1st and July 1st reductions in access charges and other fees. Given these findings and the consistent historical pattern of AT&T's rate increases relative to access charges, there is no factual basis on which to presume that the Big Three long-distance carriers would pass through to residential customers any future decreases in access charges. These findings also dispel the myth that the residential long-distance market is adequately competitive.



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ASSESSMENT OF AT&T'S STUDY OF ACCESS CHARGE PASS-THROUGH

by

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October 16, 1998

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ASSESSMENT OF AT&T'S STUDY OF ACCESS CHARGE PASS-THROUGH

I. INTRODUCTION AND SUMMARY

A. Introduction

AT&T released a brief report of what purports to be a study of its quarterly pass-through to customers of changes in access charges from the second quarter of 1997 through the second quarter of 1998.¹ The United States Telephone Association asked us to evaluate AT&T's study methodology, with a focus on AT&T's asserted pass-through of access charge changes to residential customers. We conclude that the methodology is highly misleading. Most of the flaws systematically disguise AT&T's residential rate increases relative to the reductions in AT&T access charges and other fees. We discuss the flaws in detail below.

B. Summary of Findings

A brief summary of our findings is as follows:

AT&T claims that it reduced consumer rates by \$123 million more than its change
in access charges from the second quarter of 1997 to the second quarter of 1998.
However, if one corrects just three of the errors in AT&T's study, the corrected data
would show instead that AT&T increased consumer rates by about \$500 million
over that period.

AT&T News Release, "Audit Confirms AT&T's LD Prices Declined by More than Access Fee Reduction" (August 13, 1998). Part of the release was a letter from Pricewaterhouse Coopers dated August 13, 1998, attesting that it audited AT&T's calculations. AT&T distorts the nature of the audit. Contrary to AT&T's characterization of it, the audit did not confirm that AT&T's prices declined by more than its access fee reduction. Rather, the audit concluded that AT&T implemented its stated methodology. However, the audit did not evaluate whether the methodology yields meaningful results. As discussed below, AT&T's methodology is seriously flawed.



- AT&T's own uncorrected data show that, in the first half of 1998, it raised residential rates relative to access charges.
- AT&T apparently ignores the January 1st elimination of the \$0.5371 per line NECA assessment for the Universal Service Fund and Lifeline Assistance plan. Therefore, its figures fail to show that its access charges and other fees for residential customers fell—not rose—in the first quarter of 1998. If AT&T were to correct this omission, then its report would have shown a decrease in its consumer costs of \$0.0077 per minute in that quarter, not an increase of \$0.0005 per minute.
- AT&T measures access charge changes by a method that is largely consistent with price index theory: for a given quantity and mix of access, it calculates the average effect of new access charges. However, on the revenue side, it uses a method that is inconsistent with price index theory. Instead of calculating a change in average rates while holding the mix of calls constant, it calculates average revenue per minute. This inconsistency in method introduces many distortions that hide its rate increases relative to access charges, such as the following:
 - AT&T counts as a decrease in rates a trend toward a larger number of directdialed calls relative to the number of more expensive calls. Correcting this error would raise its estimate of residential rate increases by \$0.004 per minute.
 - AT&T's decrease in international rates is attributable to decreases in international settlement rates, not to a decrease in domestic interstate access charges. If we eliminate the effect of its international rate changes, then we see that its domestic rates increased by another \$0.004 more than its figures reveal.
 - AT&T admits that its November 8, 1997, rate increase caused customers to shift some of their calling from peak periods to off-peak periods. Yet AT&T erroneously counts that shift as a rate decrease.
- AT&T changed its promotional practices to emphasize free minutes and de-emphasize checks to customers who switch to or stay with AT&T. This change artificially



reduced its average revenue per minute even though it would not have changed the total amount that customers pay for using AT&T.

 AT&T's description of its procedure for allocating access charges to the Consumer and Business divisions is ambiguous. Given its other distortions, this ambiguity raises questions about whether misallocations might have understated the access charge reductions for residence customers.

Subsequent sections explain those findings.

II. AT&T'S OWN DATA SHOW THAT IT DID NOT PASS THROUGH THE JANUARY 1ST CHANGES IN ACCESS CHARGES TO ITS RESIDENTIAL CUSTOMERS.

Before presenting our evaluation of AT&T's methodology, we should make one important observation: even according to AT&T's own misleading data, its average revenue per minute (ARPM) for residential customers was higher in the first half of 1998 than it was in the fourth quarter of 1997. In other words, it raised residential rates relative to its access charges after January 1, 1998. AT&T hides this fact by using the second quarter of 1997 as the base period and accumulating changes thereafter.

Suppose we use AT&T's own data but use the fourth quarter of 1997 as the base period instead of the second quarter of 1997. We present the resulting calculations in Table 1 below. Since each row of the table is the change from the previous quarter, the table tells us by how much AT&T's ARPM and access costs changed from the fourth quarter of 1997. In other words, if AT&T's methodology were appropriate, the table would tell us whether AT&T raised or lowered residential rates relative to access charges. Changing the base period to the fourth quarter of 1997 changes columns D and F relative to what AT&T presented; the other columns remain unchanged from AT&T's version. We show the changed numbers in italics.

² Numbers might not add because of rounding.



Table 1
AT&T's Data on Changes in Consumer Markets Division
Interstate and International ARPM versus FCC-Ordered Changes in Access Charges
Changes from 4Q97

	Α	В	C=A-B	D	E	F=D*E
Time	Change in	Change in Access per	Change in ARPM Minus Access per	Cumulative Change in ARPM Minus Access per	Minutes	Current
Period	ARPM	Minute	Minute	Minute	(M)	(\$M)
1Q98	-0.0041	0.0005	-0.0046	-0.0046	17,284	-80
2Q98	+0.0112	0.0000	0.0112	0.0066	16,707	<u>110</u>
					Cumulative	31

According to AT&T's own data in that table, in the first quarter of 1998 AT&T's change in residential interstate and international average revenue per minute fell while what it reports as the residential interstate access charge per minute rose. However, in the second quarter, the average revenue per minute rose by more than the decrease in the first quarter. This comparison is not surprising, since AT&T did not begin to charge its residential calling-plan customers \$0.95 per account per month until April.³ (Before that, it only charged \$1.50 to customers with second lines.) The second-quarter increase was so large that the cumulative change in average revenue per minute relative to the change in access charges was positive for the first and second quarters combined. Thus, AT&T's own data show that AT&T did not pass through the January 1 changes in access charges to its residential customers. Further, AT&T did not fully deploy its \$0.95 "carrier line charge" on April 1,⁴ perhaps because of delays in dealing with numerous billing systems. Therefore, even the second quarter data understate the eventual impact of AT&T's carrier line charge.

If AT&T were to present similar calculations for the third quarter of 1998, the results would be even more striking. The residential ARPM would jump for three reasons:

⁴ Based on analysis of data from Market Facts, Inc., and PNR and Associates, Inc., MarketShare MonitorTM (September 9, 1998).



³ Market Dynamics, Inc., Long Distance for Less: Dr. Bob's "Blue Sheet" (March 31, 1998), p. 3.

- The third quarter would reflect the full effects of AT&T's "carrier line charge," which had not been fully deployed during much of the second quarter.
- On July 1, AT&T extended its "carrier line charge" to all its residential customers, not just its calling plan customers as before.⁵
- AT&T imposed an additional "universal connectivity charge" of \$0.93 per residential account.⁶

We estimate that the combined effect of the second and third of the above changes would cause the third quarter residential ARPM to jump another \$0.016 per minute in spite of a further reduction in access charges and other fees of \$0.002 per minute.⁷ A line added to the bottom of Table 1 for the third quarter of 1998 would show an increase in AT&T's measure of the cumulative change in revenues net of access charges of at least \$440 million. On an annualized basis, this single quarter's rate increase would be on the order of \$1 billion.

Then, beginning in August, AT&T imposed a minimum charge of \$3.00 per month on any new customers.⁸ (The charge will also apply to any existing customer that changes calling

AT&T news release, "AT&T Announced \$3 Monthly Minimum for New Residential Customers" (August 14, 1998), http://www.att.com/press/0898/980814.csa.html. AT&T's \$0.93 and \$0.85 monthly charges do not count toward satisfying the \$3.00 minimum. Low-income customers who qualify for a state telephone assistance program are exempt. A few selected other groups are also exempt. (AT&T Tariff FCC No. 27 (effective September 5, 1998), p. 4-7.3.) Samuel A. Simon, Chairman of the Telecommunications Research and Action Center (TRAC) termed AT&T's new policy a "'dead-of-night' surprise attack on consumers by AT&T.... It is clear that AT&T knows its actions are anti-consumer and is attempting to minimize public awareness of what it is doing by announcing it on a Friday afternoon in August when all of official Washington, including the Federal Communications Commission, is on vacation." (TRAC news release, "AT&T Breaks Faith with Consumers" (August 14, 1998), http://www.trac.org/nr/081498.html.)



⁵ Slightly compensating actions were AT&T's reduction of the carrier line charge from \$0.95 to \$0.85 per account and its elimination of a charge of \$1.50 for basic-rate residential customers who had second lines.

⁶ AT&T news release, "AT&T Assessing Flat Fee on Monthly Residential Bills for Universal Service Fund" (June 18, 1998), http://www.att.com/press/0698/980618.csa.html. Low-income users who qualify for a state Lifeline program are exempt. "Dr. Bob's Telecom CheckSheet," No. 121 (August 21, 1998).

Based on analysis of data from *MarketShare Monitor*, op. cit. The change in ARPM reported here differs from that in Paul S. Brandon and William E. Taylor, "AT&T, MCl, and Sprint Failed to Pass through the 1998 Interstate Access Charge Reductions to Consumers" (October 16, 1998). The reason is that here the basis is minutes of all types of interstate call whereas in our other report the basis is interstate interLATA domestic direct-dialed minutes.

plan after January 1, 1999.) This policy could eventually raise its average rates by as much as an additional \$0.012 per minute.⁹

III. AT&T'S METHODOLOGY MASKS RESIDENTIAL RATE INCREASES RELATIVE TO ACCESS CHARGE REDUCTIONS.

In the section above, we showed that AT&T's own data demonstrates that it increased residential rates relative to access charges after the January 1st access reforms. Unfortunately for residential customers, even those calculations understate the extent of its rate increases relative to the fees it pays. We explain below several of the conceptual flaws in AT&T's methodology that we have identified. We have quantified the size of three of the errors.

A. AT&T Ignores a Reduction in Its Costs.

One of the changes that the FCC ordered to be effective on January 1 was the elimination of the \$0.5371 monthly fee that NECA had been assessing to long-distance carriers for each presubscribed line. This fee was for the Universal Service Fund and Lifeline Assistance plan. AT&T apparently ignores this cost reduction in its study, as evidenced by its data definition: 11

The Company has included in its calculations all revenues and access expenses associated with: (1) the Universal Service Fund (USF), to which AT&T is required to contribute based upon its retail revenues¹²; (2) the Presubscribed Interexchange Carrier Charge (PICC), which is a facilities-based access charge per presubscribed line; and (3) Payphone Compensation.

¹² "These payments support Schools and Libraries, and Rural Health Care Programs, as well as High Cost Support and Low-Income Support Mechanisms."



Based on analysis of data from MarketShare Monitor, op. cit. Also see fn. 7.

¹⁰ Federal Communications Commission, First Report and Order, Access Charge Reform, CC Docket 96-262, Price Cap Performance Review for Local Exchange Carriers, CC Docket 94-1, Transport Rate Structure and Pricing, CC Docket No. 91-213, and End User Common Line Charges, CC Docket No. 95-72 (Released May 16, 1997), FCC 97-158, ¶ 94 and fn. 114.

¹¹ AT&T News Release, op. cit., Attachment C.

Thus, although AT&T includes the new PICC, it ignores the elimination of the NECA assessment, which, for residential customers, had cost AT&T slightly more than the PICC.¹³ We estimate that, by ignoring the elimination of the NECA assessment, AT&T understates its January 1st cost reduction by about \$0.0082 per minute.¹⁴ Consequently, if its calculations were otherwise correct, instead of showing an increase of \$0.0005 per minute in its access expense in the first quarter of 1998, it should have shown a *decrease* of \$0.0077 per minute:¹⁵

<u>Correction #1</u>: AT&T ignored the elimination of the \$0.5371-per-line NECA assessment for the Universal Service Fund and Lifeline Assistance plan. To correct this error, subtract \$0.0082 from AT&T's figure for the 1Q98 access change.

If we were to incorporate this correction into Table 1 above, then AT&T's cumulative increase in profit margin at the expense of residential customers would be about \$300 million for the first half of the year, or about \$600 million on an annualized basis.

B. AT&T Compares Changes in Access Charges and Rates by Inconsistent Methods.

1. Principles

AT&T disguises its rate increases by comparing changes in access charges and toll rates on inconsistent bases. AT&T explains how it calculates its reduction in access charges, clearly indicating that its calculation is on a reprice basis. It holds access quantities constant, and it calculates its access bill under two different access tariffs. This procedure is consistent with the way economists calculate price changes (except as discussed further below), and it is consistent with the theorems of price index theory. Inconsistently, AT&T compares the access rate change calculated on that reprice basis with toll rates calculated using average revenue per minute (ARPM). The latter technique can yield misleading results and violates the proper procedure specified by price index theory.



¹³ Based on analysis of data from MarketShare Monitor, op. cit.

¹⁴ Based on analysis of data from MarketShare Monitor, op. cit.

 $^{^{15}}$ \$0.0005-\$0.0082 = -\$0.0077.

The ARPM measure is unable to distinguish changes in price from changes in revenue brought about by other effects. Unlike any valid price index, ARPM rises and falls as the mix of services purchased changes. To an economist, ARPM is not an acceptable price index and is not used (for example, by the Bureau of Labor Statistics) to measure changes in the prices that consumers pay. For example, one would never think of measuring the change in automobile prices by the change in average revenue per car ("ARPC") because the resulting "ARPC" would change whenever the mix of large and small, or luxury and basic cars changed, and customers are not indifferent to that mix. Suppose no automobile prices change, but a low-priced economy car is introduced which you buy instead of your usual luxury car. The "ARPC" will fall but the welfare and competitive effects of that reduction are very different from the effects of an overall reduction in price that results in the same reduction in "ARPC."

2. An Illustration: AT&T Substitutes Alternative Access for LEC Switched Access, Its Price of Access Is Unaffected, and Its ARPM Falls by More Than What the Customer Saved.

Many extraneous factors can reduce ARPM even though AT&T could have kept rates constant or even raised them. Subsequent sections explain many examples. Perhaps most blatant is the following scenario: suppose that AT&T had been substituting either dedicated access, its own switched access, or services from competitive access providers for switched access provided by a local exchange carrier (LEC). It would have been decreasing its LEC-provided switched access bill by deploying alternative access. Yet, since it holds its access demands constant in its calculation of the change in access rates, this reduction in its access bill does not show up in what it reports as its reduction in access charges. ¹⁶

Next consider how that substitution of alternative access for LEC access would affect AT&T's calculations of its ARPM. If substituting alternative access reduces AT&T's access

AT&T includes in its calculations only the access minutes supplied by local exchange carriers and the access charges associated with them (plus USF assessments, PICC charges, and payphone compensation). It excludes dedicated access, its own switched access, or services from competitive access providers: "These impacts are developed by using local exchange carrier (LEC) rates by jurisdiction by rate element applied to the applicable LECs access minutes, compared to the rates in effect in the previous quarter. . . . Foreign billed revenue and associated foreign access expense were excluded as were the revenue and access expense associated with private line and dedicated access services." "Audit Confirms AT&T's LD Prices Declined by More than Access Fee Reduction," op cit., Attachment C.



bill, then it would tend to offer the customer a lower per-minute rate than before (for large business customers, at least), although AT&T might also charge a fixed monthly charge, especially if the alternative access is dedicated access. Consider an example: the customer makes 1,000 minutes of calls per month. When the customer used LEC access, AT&T charged \$0.20 per minute with no monthly charge. The customer's total bill was thus \$2,000 per month. After substituting dedicated access, AT&T charges \$0.12 per minute and a fixed monthly charge of \$500. The customer's total bill is now \$1,700, so he has saved 15 percent of his old bill, or \$0.03 per minute. However, AT&T includes the full reduction in its per-minute price—but not the fixed monthly charge 17—in its calculation of ARPM. This customer's ARPM (as AT&T would calculate it) fell by 50 percent, or \$0.10 per minute—from \$0.20 per minute to \$0.10 per minute—even though the customer saved only 15 percent or \$0.03 per minute. The absurdity of AT&T's methodological inconsistency is now clear: AT&T takes credit for reductions in its per-minute charges yet excludes the fixed monthly charges (or the reductions in AT&T's own costs) for the form of access that made the reductions in per-minute charges possible.

3. More Generally, Changes in Demand Mix Do Not Pass Through Access Charge Reductions.

The important economic dispute is whether one should measure the pass-through of access charge reductions by reductions in ARPM or reductions in price. AT&T clearly maintains that if enough customers shift their calling to low-priced services, its obligation to pass through access charge reductions will be fulfilled without the need for it to reduce any price. To settle this dispute, it is instructive to examine what would happen in an effectively competitive market. Suppose that the LEC were to reduce access charges by 1 cent per minute, which reduces the long-distance carriers' marginal cost by 1 cent and average costs by at least 1 cent. ¹⁸ Suppose also that a long-distance carrier were to respond by changing no prices but,

¹⁸ In an effectively competitive market with no barriers to entry, a reduction in access charges translates into a reduction in marginal costs, which would be passed through—penny for penny—in lower per-minute long-(continued...)



¹⁷ "Foreign billed revenue and associated foreign access expense were excluded as were the revenue and access expense associated with private line and dedicated access services." "Audit Confirms AT&T's LD Prices Declined by More than Access Fee Reduction," op cit., Attachment C, emphasis added.

over time, enough of its customers migrate from operator-handled calling to direct-dial calling so that its ARPM falls by 1 cent. Would that reduction in ARPM be all the pass-through that would occur in a competitive market?

No. In equilibrium, migration of customers from high-priced services to low-priced services has no effect on the amount of pass-through to output prices that would occur in a competitive market. As customers shift over time to direct-dial calling, the long-distance carrier's average costs would fall because it costs less to provide direct-dialed calls than to provide operator-handled calls: the lower cost of direct-dial calling explains why competitive equilibrium prices for direct-dial calling were lower than operator-handled prices. If the market were competitive, then the long-distance carrier's average price must fall as its costs fall or else the shift in demand would lead to supra-normal profits, additional entry and a lower market price. If, in addition, access charges were to fall by a penny, then the market price would fall by that penny *plus* the amount by which the shift in demand caused incremental costs to fall plus the amount by which the stimulation of demand caused average costs to fall. Reductions in ARPM stemming from shifts in demand would have no effect on the market price reductions that competitive forces would bring about.

4. The Trend toward Direct-Dial Calling Causes ARPM To Understate Price Increases.

The trend toward direct-dialed calling discussed above is not simply an illustration. There has been such a trend. For a sample of residential customers, we calculated the revenues and minutes that AT&T received from various classes of calls in the second quarter of 1997 and in the first four months of 1998.¹⁹ Direct-dialed calls comprised 92.3 percent of the

distance prices. The resulting lower long-distance prices would lead to additional long-distance demand, and, because long-distance carriers bear significant fixed costs, this demand stimulation would reduce the IXCs' average unit costs by more than the per-minute reduction in access charges. If the incumbent long-distance carriers did not reduce prices to the new, lower average costs, then additional entry would occur to drive prices down to average unit costs. Thus, in an effectively competitive industry with important fixed costs, low entry barriers and relatively elastic demand, a one-cent-per-minute reduction in carrier access charges would result in a reduction in long-distance prices of more than one cent.

¹⁹ Based on analysis of data from MarketShare Monitor, op. cit.



^{(...}continued)

minutes in the earlier period but 93.3 percent in the later period. The trend toward a higher proportion of direct-dial calling caused an artificial drop in the residential ARPM of \$0.004 per minute irrespective of any change in prices. We have thus quantified another error in AT&T's methodology:

Correction #2: The trend toward increasing direct-dial calling caused the ARPM to drop by \$0.004 per minute more than prices changed. To correct this error, add \$0.004 to the estimate of price changes from 2Q97 through 2Q98.

C. AT&T Erroneously Claims Credit for Falling International Settlement Rates in Its Calculations of Access Charge Pass-Through.

As a result of FCC actions, international settlement rates have been falling rapidly. For instance, from 1995 to 1996, the average international settlement rate paid by U.S. carriers fell by \$0.05 per minute.²⁰ AT&T might have passed at least some of those reductions in international settlement rates through to international toll rates. These international toll rate reductions would contribute to the ARPM reductions it reports. Thus, it takes credit for this reduction in ARPM as being a pass-through of access charges, yet it excludes from its calculations the *cost* reductions—the decrease in its marginal cost of international settlements—that led to those ARPM reductions.

Consider these facts: we examined the international rates paid by a sample of AT&T residential customers during the second quarter of 1997, and we compared those rates with the rates paid by a sample of AT&T residential customers during first four months of 1998.²¹ The average revenue per minute for international calls during the later period was \$0.172 per minute lower than during the earlier period—a difference of 21 percent. That large a drop is clearly not attributable to U.S. interstate access charge changes. But that drop would have pulled down AT&T's reported residential ARPM by \$0.004 over that period even though that drop was almost totally unrelated to changes in U.S. interstate access charges:²²

²² Part of the drop in international rates was probably stimulated by reductions in international settlement rates, but part of it also resulted from a decrease in international calling-card and other operator-handled calls relative to (continued...)



²⁰ Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, *Trends in Tele-phone Service* (July 1998), Table 7.2.

²¹ Based on analysis of data from MarketShare Monitor, op. cit.

<u>Correction #3</u>: To remove the distorting effect of falling prices of international calls—which reductions have virtually nothing to do with domestic access rates—add \$0.004 to AT&T's estimate of price changes from 2Q97 to 2Q98.

D. Summary of Quantified Corrections to AT&T's Calculations

We identify additional flaws in AT&T's methodology below. But at this point let us summarize the errors we have been able to quantify. We have found the following:

- AT&T understates its reductions in costs of access and other fees paid to local exchange carriers by \$0.0082 per minute in the first quarter of 1998 because it ignored the elimination of the \$0.5371-per-line NECA assessment for the Universal Service Fund and Lifeline Assistance plan;
- AT&T's ARPM measure understates its rate increases by \$0.004 per minute from the second quarter of 1997 to the second quarter of 1998 because customers are making more inexpensive direct-dialed calls instead of other kinds of more expensive calls; and
- AT&T's ARPM measure understates its rate increases by another \$0.004 per minute from the second quarter of 1997 to the second quarter of 1998 because AT&T counted price reductions of international calls that were unrelated to access charge changes, and it did not account for the reductions in international settlement rates.

Together, these corrections increase AT&T's revenue net of access per minute by \$0.0161 per minute. What affect would these corrections have on AT&T's table regarding pass-through for its Consumer Markets Division? Assume that the reduction in international prices and the trend toward a higher proportion of direct-dial calling were spread evenly over the four quarters in the table. Thus, we would increase the change in ARPM by \$0.002 in each quarter.²³ To correct for AT&T's ignoring the elimination of the NECA assessments for the

²³ Two corrections of \$0.004 per minute each divided over four quarters equals \$0.002 per minute per quarter.



^{(...}continued)

international direct-dialed calls, which are less expensive. This again emphasizes the inadequacies of ARPM as a measure of price changes.

Universal Service Fund and Lifeline Assistance plan, we would replace its figure for the access change in the first quarter of 1998 with -\$0.0077. With these few corrections, Table 2 shows the revised calculations.²⁴ We show in italics the figures that differ from AT&T's original table.

Table 2
AT&T's Data on Changes in Consumer Markets Division
Interstate and International ARPM versus FCC-Ordered Changes in Access Charges
Changes from 2Q97 with Three Corrections

	Α	В	C=A-B	D	E	F=D*E
·				Cumulative		
			Change in	Change in		
			ARPM	ARPM		
		Change in	Minus	Minus		
		Access and	Access and	Access and		
Time	Change in	Other Fees	Other Fees	Other Fees	Minutes	Current
Period	ARPM	per Minute	per Minute	per Minute	(M)	(\$M)
3Q97	-0.0014	-0.0065	0.0051	0.0051	17,617	90
4Q97	-0.0054	-0.0002	-0.0052	-0.0001	17,749	-2
1Q98	-0.0021	-0.0077	0.0056	0.0055	17,284	95
2Q98	0.0132	0.0000	0.0132	0.0187	16,707	<u>313</u>
					Cumulative	496

In its original table, AT&T's erroneous data appeared to show that its cumulative rate reductions exceeded the changes in access charges by \$123 million for residential customers.²⁵ In contrast, this table with only three corrections demonstrates AT&T's massive increase in residential rates relative to access charges and other fees. There are probably additional distortions remaining in the data, such as discussed in subsequent sections. Even so, according to the data with just three corrections, AT&T's cumulative increase in residential margins in excess of access charges and other fees was \$0.0187 per minute or \$496 million. Let us also remind the reader that AT&T's July 1998 increases in fixed monthly charges represent a further rate

²⁵ "Audit Confirms AT&T's LD Prices Declined by More than Access Fee Reduction," op. cit.



²⁴ Numbers might not add because of rounding.

increase of \$0.018 per minute or about \$1 billion per year net of access charges and other fees, and its \$3 minimum could increase rates up to an additional \$0.012 per minute.

E. AT&T's Change in Promotion Policy Artificially Reduces the ARPM.

As AT&T states in its annual report, it has increased the volume of free minutes it gives to customers in place of sending customers checks for switching to or staying with AT&T.²⁶ Its increasing use of free minutes reduced its ARPM, whereas its former use of checks was an expense. Even if the policy change left its bottom line and customers unaffected, the change would artificially reduce ARPM relative to access charges.²⁷

F. Shifts in Calling from Peak to Off-peak Rate Periods Artificially Reduce the ARPM.

Beginning November 8, 1997, AT&T extended its basic full day rates to more hours in the week. It also increased weeknight rates by applying evening rates instead of night-weekend rates. It partially compensated for those rate increases by shifting the calls during the hours of 5:00 p.m. to 11:00 p.m. on Sunday from the evening rate period to the weekend rate period. The net effect of all these changes was a rate increase. AT&T defended its rate changes by claiming that customers would shift some of their calling from what became more expensive hours to less expensive hours. It claimed that these shifts, together with a reduction in demand, would make the rate changes near-revenue-neutral. This case is another illustration of the fallacy of using ARPM to measure rate changes. For a given usage pattern, AT&T's changes were a net increase in rates. It is true that customers would respond to that rate increase by shifting some of their calls to other hours. But that shift is not a rate decrease. Instead, customers have shifted their calls to hours that were less desirable to them. Therefore, even if the rate increase were revenue neutral after accounting for such shifts—i.e., even if consumers'

²⁸ Rick D. Bailey, Vice President Federal Government Affairs, AT&T, letter to A. Richard Metzger, Chief, Common Carrier Bureau, FCC (November 17, 1997), p. 2.



²⁶ AT&T 1997 Annual Report, p. 29.

²⁷ We cannot quantify the size of this error in AT&T's analysis, since we do not know the change in AT&T's expenditures on promotional checks.

expenditures were unchanged—consumers are worse off. In addition, by shifting traffic to off-peak hours, AT&T has reduced its costs, and it ignores this effect in its calculations.²⁹

G. AT&T's Allocations of Access Charges between Residential and Business Customers Raise Questions.

AT&T describes how it allocates access charges to its Consumer and Business divisions:³⁰

The Consumer and Business split of the access expense reduction was calculated using Consumer and Business conversation minutes of use converted to access minutes.

This description is ambiguous in at least three respects. Given its other systematic distortions, these ambiguities raise questions about whether AT&T might have misallocated access charges between the Consumer and Business divisions.

<u>First</u>, it is not clear which of these two interpretations applies:

- 1. allocate total access expense to the Consumer and Business divisions in proportion to the respective conversation minutes of the two divisions, or
- 2. using knowledge regarding the use of services that are switched at only one end versus switched at both ends, calculate a ratio of access minutes to conversation minutes for each division; then, from data on the number of conversation minutes of each division, deduce the number of access minutes attributable to each division, and allocate access expense in proportion to those access minutes.

Since much of business usage is switched at only one end, those two procedures would yield very different allocations of access expense between the Consumer and Business divisions. If AT&T used the first procedure, then it would have allocated too little of January 1st's 22 percent reduction in per-minute access charges to residential customers.

^{30 &}quot;Audit Confirms AT&T's LD Prices Declined by More than Access Fee Reduction," op. cit.



²⁹ We cannot quantify the size of this error in AT&T's analysis, since we do not know the extent to which customers shifted to off-peak periods in response to AT&T's extending the hours in which it charged peak rates.

<u>Second</u>, AT&T's above description of its allocation procedure seems to imply that it even allocates USF and PICC charges to the two divisions in proportion to conversation minutes (or calculated access minutes). However, prices, usage per line, and the PICC rates differ so much between residential and business customers that an allocation based on minutes appears likely to be a misallocation.

Third, AT&T includes the new payphone compensation fees in its calculations. But it does not reveal specifically how it assigned these fees between the Consumer division and Business division. AT&T's description of its procedure appears to imply that it allocates payphone compensation fees proportional to Consumer and Business conversation minutes (or access minutes). On other occasions, we have analyzed data on both residential and small business toll calling. A prominent difference was that a much higher proportion of business toll bills was for calling-card calls than was the case with residential customers. Thus, AT&T's apparent procedure appears likely to allocate too much of the new payphone compensation fees and payphone access charges to residential customers.

IV. CONCLUSION AND SUGGESTED QUESTIONS

A. Conclusion

In sum, because of many methodological errors, AT&T's study of access charge pass-through disguises the fact that AT&T raised rates for residential customers and that AT&T's access charges and other fees fell. It therefore failed to pass through the reductions in access charges and other fees to residential customers. AT&T claims to have passed through \$123 million more in rate reductions to residential customers than its changes in access charges from the second quarter of 1997 to the second quarter of 1998. Yet its own data, with all its methodological flaws, reveal that it raised residential rates relative to access charges after January 1, 1998. Further, by making only three corrections, we show that AT&T raised residential rates by at least \$496 million from the second quarter of 1997 to the second quarter of 1998.

³¹ Interestingly, AT&T passes through the payphone surcharge for calls billed to residence customers, but it does not do so for calls billed to commercial customers. Market Dynamics, Inc., Long Distance for Less: Dr. Bob's "Blue Sheet" (August 18, 1997), p. 2.



B. Suggested Questions to Put to the Long-Distance Carriers

One of us already suggested questions the FCC could ask the long-distance carriers to determine itself whether they did or did not pass through access charge reductions.³² (See the Appendix for a reproduction of those suggestions.) The discussion in Section III above particularly emphasizes the importance of asking for data that segments price changes rather than accepting aggregate data. Specifically, for example, to prevent changes in the mix of calls from distorting measures of price changes, we recommend that the FCC ask for data that separates direct-dialed calls from calling-card and other types of calls. The data should also separate domestic from international calls, day from evening and weekend calls, calls of longer distances from calls of shorter distances, etc. If a carrier includes changes in international prices in its data, then it should also report changes in its marginal rates for international settlements. The carriers should also report their expenses for promotional checks send to customers, by market segment. It would also be prudent for the FCC to clarify what is included in the carriers' data. For instance, the FCC should want to ensure that data for AT&T's Consumer division do not include toll or other revenues from AT&T's wireless services. Prices for wireless services change for reasons that have virtually nothing to do with changes in access charges. Only with such disaggregate data will the FCC be able to disentangle changes in prices from changes in the mix of calls. Once it were to do so, we presume that it would



³² William E. Taylor, affidavit on behalf of the United States Telephone Association before the FCC, Customer Impact of New IXC Charges, CC Docket Nos. 96-45 and 96-262, ¶ 32.

confirm what we have shown here and what we have shown elsewhere³³—that the Big Three failed to pass through access charge reductions to residential customers.



³³ Paul S. Brandon and William E. Taylor, "AT&T, MCI, and Sprint Failed to Pass through the 1998 Interstate Access Charge Reductions to Consumers" (October 16, 1998).

SUGGESTED QUESTIONS THAT FCC COULD ASK OF LONG-DISTANCE CARRIERS³⁴

To determine the effect of the January 1998 access charge changes, the Commission should recognize that whatever rate changes the IXCs might have made before January 1, 1998 are irrelevant to the question of whether they have passed through per-minute access charge reductions filed on that date. The Commission should also recognize that changes in ARPM that do not account for the change in the mix of services consumed are inadequate measures of the IXC's toll rate changes for the purpose of ensuring that access charge reductions are passed through in the long-distance market, as they would be passed through in an effectively competitive market. AT&T, MCI and Sprint should submit to the FCC the following data:

- Report revenues and quantities of all switched services during, say, 4Q97. Include all calling plan subscription fees, recurring and nonrecurring charges for the dedicated portion of one-ended switched services such as WATS, 800 service, and Megacom. Also report the calculation of ARPM, where the total revenues from all those components are divided by total conversation minutes, including any minutes provided for free as part of calling plans or block-of-time services. (Exclude internal IXC "official" revenues and minutes. Also exclude all employee "concession" revenues and minutes. For comparability, exclude access charges attributable to official and concession service as well.) Segment the revenue and demand quantities between business and residential customer segments. Document the data sources, and include copies of the (proprietary) internal company reports from which the data are drawn.
- By customer segment, calculate what revenues those same quantities would generate at the rates in effect after January 1, 1998. Itemize the portion of those revenues obtained from PICC charges and from USF charges. (If the IXC plans significant revisions in its PICC/USF recovery process before June 1998, then document those plans—on a proprietary basis—and their estimated revenue impact.) Report the calculation using two methods, using two alternative assumptions: (a) customers subscribe to the same calling plans and services they had in 4Q97, so a pure "rate change" effect can be visible; and (b) assume some well-documented migration pattern among services and calling plans (but holding each customer's demand constant), explicitly based on historical, documented migration patterns. (The historical data must not be more than two years old.) Include tariff or other price schedule

³⁴ From affidavit by William E. Taylor, op. cit.



pages and documentation of the calculation method. Show the calculation procedure in a PC-readable format such as Lotus 1-2-3, Microsoft Excel, *etc*.

• If, under method (b) above, an IXC assumes an increase in the proportion of residential customers who subscribe to calling plans, then reconcile that assumption with the Yankee Group data showing a decrease in the percentage of residential customers subscribing to calling plans from 1996 to 1997.

